CLAIMS

We claim:

1. A method for deriving an optimized rule set for a fuzzy logic system, said method comprising the steps of:

generating a pool of random rules having a fitness function and storing said random rules;

evolving said random rules using a genetic algorithm to improve the fitness function of said rules in said random rule set until the overall fitness function of said rules plateaus, thereby generating an optimized rule; and

storing said optimized rule in an optimized rule storage area, said rules stored in said optimized rule storage area comprising said optimized rule set.

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2. A method as set forth in claim 1, wherein said generating step includes the steps of:

checking said optimized rule storage area to determine if it contains any optimized rules; and

using any optical rules contained in said optimized rule storage area when generating said pool of random rules.

3. A method is set forth in claim 1, wherein said evolving step comprises evolving the features of said random rules.

4. A method is set forth in claim 1, wherein said evolving step comprises evolving the qualifiers of said random rules.

5. A method is set forth in claim 1, wherein said evolving step comprises evolving the operators of said random rules.

6. A method is set forth in claim 1, wherein said evolving step comprises evolving the features, cases, qualifiers, and operators of said random rules.

7. A method as set forth in claim 1, wherein said generating, evolving, and storing steps are repeated until a predetermined number of rules are stored as said optimized rule set.

8. A method as set forth in claim 7, wherein said repeating of said steps occurs on a real-time basis.

9. At method for deriving an optimized rule set for a fuzzy logic system for use in stock market analysis, said method comprising the steps of:

generating a pool of random rules having a fitness function and storing said random rule;

evolving said random rules using a genetic algorithm to improve the fitness function of said rules in said random rule set until the overall fitness function of said rules plateaus, thereby generating an optimized rule;

storing said optimized rule in an optimized rule storage area, said rules stored in said optimized rule storage area comprising said optimized rule set;

applying a stock market data set to said optimized rule set; and

outputting a stock market analysis result based on the application of said stock market data set to said optimized rule set.

10. A method is set forth in claim 9, wherein said evolving step comprises evolving the features of said random rules.

11. A method is set forth in claim 9, wherein said evolving step comprises evolving the qualifiers of said random rules.

12. A method is set forth in claim 9, wherein said evolving step comprises evolving the operators of said random rules.

13. A method is set forth in claim 9, wherein said evolving step comprises evolving the features, cases, qualifiers, and operators of said random rules.

14. A method as set forth in claim 9, wherein said generating, evolving, and storing steps are repeated until a predetermined number of rules are stored as said optimized rule set.

15. A method as set forth in claim 14, wherein said repeating of said steps occurs on a real-time basis.

16. A method as set forth in claim 9, wherein said stock market data set comprises data regarding a particular stock choice.

17. A method as set forth in claim 9, wherein said stock market data set comprises data regarding a particular stock market.

18. A method as set forth in claim 9, wherein said stock market data set comprises data regarding comprising a particular segment of stocks.

19. A method as set forth in claim 9, wherein said stock market data set comprises data regarding comprising mutual funds.

20. A method as set forth in claim 9, wherein said stock market data set comprises data regarding comprising futures.